Massachusetts Department of Environmental Protection
Bureau of Waste Prevention – Industrial Wastewater

BWP IW 38 & BWP IW 39

Permit for Industrial Sewer User

W205023
Transmittal Number

Facility ID# (if known)

DEP Use Only

Date Received

Important Instructions for Completing This Form

The questions on this form apply to existing and new facilities discharging industrial wastewater to sewers. If you are completing this form for an existing facility, answer the questions as they apply to its current status. If you are completing this form for a new facility, your answers will reflect your commitment to comply with the requirements as set forth in each question.

Existing facilities are defined as facilities in existence as of July 12, 2007. New facilities are defined as facilities constructed after July 12, 2007.

Answer all questions, except those that you are directed to skip. Please DO NOT answer questions that you are directed to skip

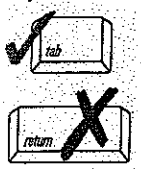
Permit Category (Select One)

☐ BWP IW 38: Industrial Sewer User in IPP POTW discharging more than 50,000 GPD

☒ BWP IW 39: Industrial Sewer User in Non-IPP POTW discharging more than 25,000 GPD

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Intel Massachusetts, Inc.
1a. Facility Name

75 Reed Road
1b. Facility Address 1

1c. Facility Address 2

Hudson
1d. City

MA
1e. State

01749
1f. Zip Code

978-553-4737
1g. Phone Number

978-553-3202
1h. Fax Number

770474484
1i. Federal Employer Tax Identification Number (FEIN or TIN)

Mailing Address: ☒ Check here if same as Facility Address and skip to Contact Information.

2a. Mailing Address: Street or P.O. Box

2b. Mailing Address 2

2c. City

2d. State

2e. Zip Code

Contact Information:

Robert King
3a. Contact Person Name

Sr. Environmental Engineer
3b. Contact Person Title

978-553-4737
3c. Phone Number

3d. Extension

bob.king@intel.com
3e. Email Address

B. Industrial Wastewater Information

1. Project Description (Check All That Apply)

☐ 1a. New Construction

☐ 1b. Permit Renewal

☐ 1c. Increasing Flow From Existing Connection

☐ 1d. New or Modified Industrial Wastewater Pretreatment System (IWPS)

☒ 1e. Existing Unpermitted Connection (Constructed Before 7/12/07)

2. List, in descending order of significance, the Standard Industrial Classification (SIC) codes, which best describe the facility producing the discharge in terms of the principal products or services provided. Also, specify each classification title. (See Appendix B in the Instructions)

3674 2a. SIC Code	SEMICONDUCTORS AND RELATED DEVICES Description
2b. SIC Code	Description
2c. SIC Code	Description
2d. SIC Code	Description

3. List all sewer connection(s) and their maximum daily flow(s) in gallons per day (GPD) from your facility going to the Publicly Owned Treatment Works (POTW):

	1 3a. Connection #	3b. Connection #	3c. Connection #	3d. Total Flow, All Connections
SANITARY	50,000 GPD	GPD	GPD	GPD
INDUSTRIAL	750,000 GPD	GPD	GPD	GPD
TOTAL	800,000 GPD	GPD	GPD	GPD

4. Are you in compliance with the Massachusetts Historical Commission requirements?

☒ Yes ☐ No* *If No, You Must Comply With Massachusetts Historical Commission Requirements **BEFORE** You Can Submit This Application.

5. Are you in compliance with Massachusetts Environmental Policy Act (MEPA) requirements?

☒ Yes ☐ No* *If No, You Must Comply With MEPA Requirements **BEFORE** You Can Submit This Application.

B. Industrial Wastewater Information (continued)

6. Check all pollutants that are present in your industrial wastewater **before** pretreatment, or if not treated, before discharge:

☒ 6a. Metals, Asbestos, Cyanide, Phenols

If Metals, Asbestos, Cyanide, or Phenols are present, provide concentrations in milligrams per liter (mg/L):

1. Antimony (total) (Sb)	mg/L	9. Nickel (total) (Ni)	ND mg/L
2. Arsenic (total) (As)	ND mg/L	10. Selenium (total) (Se)	ND mg/L
3. Beryllium (total) (Be)	ND mg/L	11. Silver (total) (Ag)	ND mg/L
4. Cadmium (total) (Cd)	ND mg/L	12. Thallium (total) (Tl)	mg/L
5. Chromium (hexavalent)	ND mg/L	13. Zinc (total) (Zn)	ND mg/L
6. Chrome (total) (Cr)	ND mg/L	14. Asbestos	mg/L
7. Copper (total) (Cu)	40 mg/L	15. Cyanide (total) (CN)	mg/L
8. Lead (total) (Pb)	1.5 mg/L	16. Phenols (total)	mg/L

☒ 6b. Toxic Pollutants (See Section 17B in the Instructions.)

If Toxic Pollutants are present, provide the total Toxic Pollutants concentration in micrograms per liter (ug/L):

ND
6b1. Total Toxic Pollutants Concentration (ug/L)

NOTE: Use the **Toxic Pollutants Form** to list individual toxic chemicals and their concentrations.

☐ 6c. Total Petroleum Hydrocarbons (TPH) > 15 mg/L

☒ 6d. pH <5 and >10 Standard Units (S.U)

☒ 6e. Other*

*If Other Pollutants are present, describe them:

Phosphorus

B. Industrial Wastewater Information (continued)

7. Is Mercury (Hg) present in your industrial wastewater **before** pretreatment, or if not treated, before discharge?

☐ Yes ☒ No* *If No, skip to Question 8.

7a. If Yes, have you identified all possible mercury sources and taken all reasonable steps to eliminate the mercury?

☐ Yes* ☐ No *If Yes, skip to Question 8.

7b. If No, explain why.

NOTE: As of May 1, 2009, all facilities must meet a discharge limit of 1 part per billion (ppb) for Mercury.

8. What is the name of the Publicly Owned Treatment Works (POTW) that receives your wastewater? (See Appendix C in the Instructions.)

Hudson WWTF
Name of POTW

9. Do you have a current sewer connection discharge permit or a current written approval issued by your local POTW? (See Section 17B in the Instructions.)

☒ Yes ☐ No* *If No, you must obtain either a permit or, if a permit is not required, a written approval from your local POTW to discharge **BEFORE** you can submit this application.

If you have a permit, provide the following information, then skip to Question 10.

001
9a. Permit Number

09/19/2009
9b. Permit Expiration Date

If you have a written approval, provide the following information:

9c. Date of Approval Letter

9d. Name of Person Who Signed the Letter

10. Are your POTW and local Sewer Authority the same entity? (See Section 17B in the Instructions.)

☒ Yes* ☐ No *If Yes, skip to Question 12.

B. Industrial Wastewater Information (continued)

11. Do you have a current sewer connection discharge permit or a current written approval issued by your local Sewer Authority? (See Section 17B in the Instructions.)

☐ Yes ☐ No* If No, you must obtain either a permit or written approval from your local Sewer Authority to discharge **BEFORE** you can submit this application.

If you have a permit, provide the following information, then skip to Question 12.

11a. Permit Number

11b. Permit Expiration Date

If you have a written approval, provide the following information:

11c. Date of Approval Letter

11d. Name of Person Who Signed the Letter

12. Is your facility currently classified as a Categorical Industrial User (CIU) pursuant to Federal Regulations? (See Appendix D in the Instructions.)

☒ Yes ☐ No* *If No, skip to Section C.

12a. List all the Categorical Pretreatment Standards applicable to your facility.

Part 469	Electrical and Electronic Components
12a1. Part Number	Point Source Category
12a2. Part Number	Point Source Category
12a3. Part Number	Point Source Category
12a4. Part Number	Point Source Category

C. Industrial Wastewater Pretreatment System

1. Do you have an on-site industrial wastewater pretreatment system (IWPS) to treat your industrial wastewater?

☒ Yes ☐ No* *If No, skip to Section D.

1a. How many IWPSs do you have?

5
Number

NOTE: If you have more than one IWPS, please use an **Additional IWPS Form** for each additional IWPS.

1b. Provide a unique identifier (i.e. name) for this IWPS:

HD-1 Acid Waste Neutralization (AWN)
Identifier/Name

C. Industrial Wastewater Pretreatment System (continued)

1c. What is the Total Design Capacity of this IWPS?

172,800
Gallons Per Day

1d. What is the Average Daily Flow of this IPWS? (Estimate if this is a new facility.)

30,000
Gallons Per Day

1e. What is the Maximum Daily Flow of this IWPS? (Estimate if this is a new facility.)

35,000
Gallons Per Day

2. Is your IWPS designed and constructed to meet all local discharge standards and the applicable Categorical Industrial User (CIU) standards in 40 CFR Chapter I, Subchapter N?

☒ Yes ☐ No* *If No, you must take immediate steps to address the non-compliance **BEFORE** you can submit this application.

3. Does this IWPS treat hazardous industrial wastewater or hazardous industrial wastewater sludge as defined in 314 CMR 7.02?

☒ Yes ☐ No* *If No, skip to Question 12.

3a. Are you treating concentrated chemical baths, e.g. spent chemical baths, or off-specification products?

☐ Yes ☒ No* *If No, skip to Question 4.

3b. If Yes, describe the concentrated chemical baths you are treating.

4. Does your IWPS meet the requirements of "treatment which is an integral part of the manufacturing process" as defined in 310 CMR 30.010?

☒ Yes* ☐ No *If Yes, skip to Question 7.

5.Do you store hazardous industrial wastewater or hazardous industrial wastewater sludge that is generated in your IWPS or in your production processes, in tanks or containers?

Note: If you use in-ground tanks for storage of hazardous industrial wastewater or sludge and your IWPS is located in a Drinking Water Zone (see Section 17C of the Instructions; reference language in 310 CMR 30.605), you are not eligible to apply for a BWP IW 38 or BWP IW 39 permit. You must use form BWP IW 40 instead.

☐ Yes ☐ No* *If No, skip to Question 7.

C. Industrial Wastewater Pretreatment System (continued)

6. Are you in compliance with the requirements for tanks and containers in 310 CMR 30.342 and 343? (See Section 17C in the Instructions)

☐ Yes ☐ No* *If No, you must take immediate steps to address the non-compliance **BEFORE** you can submit this application.

7. Do you have a U.S. Environmental Protection Agency (EPA) hazardous waste generator identification number?

☒ Yes ☐ No* *If No, skip to Question 7b.

7a. What is your EPA identification number?

MAR000010504 Skip to Question 8.
EPA ID #

7b. Explain why you do not have an EPA identification number.

8. Do you have a visible sign in place that warns against unauthorized entry into the IWPS area?

☒ Yes* ☐ No *If Yes, skip to Question 9.

8a. Explain why you do not have a visible sign in place.

9.Do you have the required spill containment for the IWPS? (See Section 17C in the Instructions.)

☒ Yes* ☐ No *If Yes, skip to Question 10.

9a. Explain why you do not have the required spill containment.

10. Is your IWPS located on land subject to flooding from a 100-year storm? (See Section 17C in the Instructions.)

☐ Yes ☒ No* *If No, skip to Question 12.

C. Industrial Wastewater Pretreatment System (continued)

11. Are you in compliance with the flood-proofing provisions in 310 CMR 30.701(2)? (See Section 17C in the Instructions.)

☐ Yes ☐ No* *If Yes, skip to Question 12.

11a. Explain why you are not in compliance with the flood-proofing provisions in 310 CMR 30.701(2).

12. What type of IWPS do you have? (Check all that apply.)

☐ Fully Automated Industrial Wastewater Pretreatment System (FAIWPS)

☒ Continuous Discharge IWPS ☐ Batch IWPS

13. Is the IWPS exempt from classification? (See Section 17C in the Instructions.)

☐ Yes* ☒ No *If Yes, skip to Question 14.

13a. What is the classification of this IWPS? (See 257 CMR 2.13: Classification of Wastewater Treatment Facilities.)

☐ Class 1I	☐ Class 2I	☐ Class 3I
☒ Class 4I	☐ Class 5 or 6C	☐ Class 1M
☐ Class 2M	☐ Class 3M	☐ Class 4M

13b. How was the IWPS' classification determined?

☐ In accordance with the requirements in 314 CMR 7.05(2)(g) 4. c. or d.

☐ By the Board of Certification of Operators of Wastewater Treatment Facilities

☒ Both

14. Is the IWPS staffed in accordance with the requirements of 314 CMR 7.05(2)(g) 5? (See Section 17C in the Instructions.)

☒ Yes* ☐ No *If Yes, skip to Question 15.

C. Industrial Wastewater Pretreatment System (continued)

14a. Explain why the IWPS is not staffed in accordance with 314 CMR 7.05(2)(g) 5.

15. Is this your first permit application under Permit Category BWP IW 38 or BWP IW 39 for this IWPS? Or, is this application a request for modification of this IWPS that currently has a BWP IW 38 or BWP IW 39 permit?

☒ Yes* ☐ No

*If Yes, you need to submit as an attachment the process flow diagram and description of the principal treatment processes for your IWPS. Otherwise, skip to Question 17.

16. How many attachments are included with this application in response to Question 15?

One attachment which includes PFD's and
treatment descriptions for all 5 IWPS's – Attachment 2.

17. Have your sewer connection and IWPS been designed and constructed in compliance with the design and construction standards as set forth in 314 CMR 7.05(2)(g)3?

☒ Yes ☐ No* *If No, skip to Question 17b.

17a. What is the Massachusetts Registered Professional Engineer (MAPE) signature date on the engineering plans?

2/2/2001
Date

Skip to Question 18.

17b. Explain why your sewer connection and IWPS have not been designed and constructed in compliance with the design and construction standards as set forth in 314 CMR 7.05(2)(g)3.

18. Provide the following information about the Massachusetts Registered Professional Engineer (MAPE) who reviewed, stamped, and signed your engineering plans:

James M. Arnold
18a. Name

412-269-4330
18b. Phone Number

41144
18c. Mass. P.E. License Number

Chemical
18d. Mass. P.E. Specialty

C. Industrial Wastewater Pretreatment System (continued)

19. Do you have an IWPS operation and maintenance manual that complies with the procedures and other requirements in 314 CMR 7.05(2)(g)6.?

☒ Yes* ☐ No *If Yes, skip to Question 20.

19a. Explain why you do not have the required IWPS operation and maintenance manual.

20. Are you keeping your IWPS operation and maintenance manual current?

☒ Yes ☐ No

21. Are you implementing your IWPS operation and maintenance manual?

☒ Yes ☐ No

D. Monitoring, Reporting & Recordkeeping

1. Are you keeping your currently effective sewer discharge permit(s), IWPS plan(s), and current operation and maintenance manual(s) (as applicable) on-site at all times?

☒ Yes* ☐ No * If Yes, skip to Question 2.

1a. Explain why you are not keeping these records on-site at all times.

2. Are you keeping all your required records including your wastewater monitoring and analyses records, operation and maintenance records and logs, bills of lading, summary reports of all incidents requiring implementation of the safety plan, and hazardous waste manifests (as applicable) on-site for at least three years?

☒ Yes* ☐ No * If Yes, skip to Question 3.

2a. Explain why you are not keeping these records on-site for at least three years.

D. Monitoring, Reporting & Recordkeeping (continued)

3. [Reserved for Toxics Reporting]

Additional reporting requirements will be added to this section in the future.

E. General & Specific Prohibitions

1. After carefully reviewing all of the general and specific prohibitions listed below, are you in compliance with these General and Specific Prohibitions?

☒ Yes* ☐ No *If Yes, read Section F and then complete Section G.

1a. Identify all the prohibitions you are not in compliance with and explain why. Attach an additional sheet of paper to this form, if necessary.

1. General Prohibitions. The permittee shall not:

a. Discharge, or cause to be discharged to a POTW, any substances, materials, or wastewater that may:

i. harm the sewers, POTW wastewater treatment process or equipment;
ii. have an adverse impact on the receiving waters; or
iii. otherwise create a nuisance or endanger public health, safety, or the environment.

b. Introduce pollutants into POTWs that pass through the POTW or interfere with its operation or performance.

c. Discharge wastewater or allow discharge of wastewater through any sewer connection that would result in a hazard to the public health or safety.

d. Discharge bypass wastewater or allow discharge of bypass wastewater through any sewer connection. If bypassing due to an emergency condition occurs, the Department and POTW shall be notified in accordance with 314 CMR 7.04(3). Such notification or its acknowledgement shall not be construed as permission by the Department or POTW to discharge bypass wastewater.

e. Discharge hazardous waste or allow the discharge of hazardous waste through any sewer connection.

2. Specific Prohibitions. The permittee shall not introduce into a POTW or its wastewater collection system the following:

a. Pollutants which may create a fire, explosion, or other hazard in the POTW or its wastewater collection system.

b. Pollutants which may cause corrosive structural damage to the POTW or its wastewater collection system. In no case shall discharges with a pH lower than 5.0 Standard Unit (S.U) or more than 10.0 S.U. be allowed, unless the local limit allows such discharges.

c. Solid or viscous pollutants in amounts which may cause obstruction to the flow in the POTW or its wastewater collection system or may result in interference.

d. Any pollutant, including oxygen-demanding pollutants, discharged at a flow rate or pollutant concentration that will cause interference with the POTW or its wastewater collection system.

e. Heat in amounts which may inhibit biological activity in the POTW, resulting in interference. In no case shall heat in such quantities that the temperature at the POTW treatment plant exceeds 40° C (104° F) be discharged, unless the Department, upon request of the POTW, approves alternate temperature limits.

F. Additional Conditions

a. All discharges shall be in compliance with the terms and conditions of this permit. The discharge of any wastewater at a level in excess of that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such a violation may result in the imposition of civil and/or criminal penalties as provided for in M.G.L. c.21, Section 42.

b. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

i. Violation of any terms or conditions of the permit;

ii. Obtaining a permit by misrepresentation or failure to disclose fully all relevant facts; or

iii. A change in conditions or the existence of a condition, which requires either a temporary or permanent reduction, or elimination of the authorized discharge.

c. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges; nor does it authorize or relieve the permittee of any liability for any injury to private property or any invasion of personal rights; nor any infringement of Federal, State, or local laws or regulations; nor does it waive the necessity of obtaining any local assent required by law for the discharge authorized herein by the Department.

d. The provisions of this permit are severable, and the invalidity of any condition or subdivision thereof shall not make void any other condition or subdivision thereof.

e. All information and data provided by an applicant or a permittee identifying the nature and frequency of a discharge shall be available to the public without restriction. All other information (other than effluent data) which may be submitted by an applicant in connection with a permit application shall also be available to the public unless the applicant or permittee is able to demonstrate that the disclosure of such information or particular part thereof to the general public would divulge methods or processes entitled to protection as trade secrets in accordance with the provisions of M.G.L. c.21, Section.27(7). Where the applicant or permittee is able to so demonstrate, the Department shall treat the information or the particular part (other than effluent data) as confidential and not release it to any unauthorized person. Such information may be divulged to other officers, employees, or authorized representatives of the Commonwealth or the United States Government concerned with the protection of public water or water supplies.

f. Transfer of Permits. Any sewer system connection permit authorizing an industrial discharge to a sewer system is only valid for the person to whom it is issued, unless prior to transfer:

i. The current permittee notifies the Department in writing at least 30 days in advance of the proposed transfer date; and

ii. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibilities, and liability to the new permittee.

g. This permit authorizing the discharge expires five (5) years from the date of issuance. The permittee shall apply for a renewal of this permit at least ninety (90) days prior to the expiration date, in accordance with 314 CMR 7.09(3)(b) for continued lawful discharges beyond the expiration date.

h. All solids, sludge, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be collected, treated, and disposed of in accordance with applicable provisions in the following:

i. Hazardous waste regulations (310 CMR 30.000).

ii. Solid waste regulations (310 CMR 19.00).

iii. Sewer discharge regulations (314 CMR 7.00).

iv. Any other applicable federal, state and local laws.

i. All samples shall be analyzed by a Massachusetts Certified Laboratory.

j. The permittee shall provide the Department, and the Department's employees, authorized representatives and contractors, access at to the facility at all reasonable times, including during wastewater treatment system operation or wastewater discharge, for purposes of conducting activities related to oversight of this permit, including inspections to monitor compliance with the terms herein. The permittee shall allow the Department to obtain information related to compliance with the requirements of this permit. Notwithstanding any provision of this permit, the Department retains all of its access authorities and rights under applicable state and federal law.

Massachusetts Department of Environmental Protection
Bureau of Waste Prevention – Industrial Wastewater

BWP IW 38 & BWP IW 39

Permit for Industrial Sewer User

W205023
Transmittal Number

Facility ID# (if known)

G. Certification Statement

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate, and complete. I certify that this facility is in compliance with all conditions and requirements of this permit, and all applicable statutes and regulations. I further certify that systems to maintain compliance are in place at the facility or unit and will be maintained even if processes or operating procedures are changed. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment of knowing violations."

(I will be responsible for publication of public notice of the applicable permit proceedings identified under 314 CMR 2.06(1)(a) through (d).)

Jeffrey Fadden
Printed Name of Applicant

Hudson Corporate Services Manager
Title

Signature of Applicant

2/4/08
Date Signed

Robert King
Name of Preparer

Sr. Environmental Engineer
Title

978-553-4737
Phone Number

MassDEP Use Only

Special Conditions:

See Attachment 1.

This document is a permit issued pursuant to Massachusetts General Laws, Chapter 21, Section 43 and Massachusetts regulations at 314 CMR 7.00. The permittee shall comply with all of the provisions contained in the permit application which are hereby incorporated and made part of this permit.

4/17/08
Date Issued

4/17/08
Permit Effective Date

4/17/13
Permit Expiration Date

John F. Kronopolus
Name of Regional BWP Section Chief

Signature

ATTACHMENT 1.

Special Conditions:

1. The permittee shall maintain compliance with the Town of Hudson's sewer use requirements and the terms and conditions of any applicable wastewater discharge permits issued by the town.

2. The permittee shall comply with the Effluent Guidelines and Standards at 40 CFR, Chapter I, Subchapter N, Part 469 – Electrical and Electronic Components Point Source Category, and applicable subcategories.

3. The permittee shall notify MassDEP of additional Effluent Guidelines and Standards as they are determined to be applicable to the facility.

4. The documents and materials attached to and referenced in the permit application are incorporated as part of the permit.

Massachusetts Department of Environmental Protection
Bureau of Waste Prevention – Industrial Wastewater

Additional IWPS Form

Use With BWP IW 38 & BWP IW 39

W205023
Transmittal Number

Facility ID# (if known)

BWP IW 39
Permit Code

Instructions: Submit a completed copy of this form for each additional Industrial Wastewater Pretreatment System (IWPS) not identified on your BWP IW 38/BWP IW 39 permit application.

Industrial Wastewater Pretreatment System (IWPS) Information

NOTE: Question numbers on this form are identical with those on the BWP IW 38/BWP IW 39 permit application or Industrial Sewer Connection Certification forms. Questions 1 and 1a have been intentionally omitted.

1b. Please provide a unique identifier (i.e. name) for this IWPS:

HD-1 Dilute Lead Waste Treatment System (DLW)

1c. What is the Total Design Capacity of this IWPS?

100,800
Gallons Per Day

1d. What is the Average Daily Flow of this IPWS? (Estimate if this is a new facility.)

30,000
Gallons Per Day

1e. What is the Maximum Daily Flow of this IWPS? (Estimate if this is a new facility.)

35,000
Gallons Per Day

2. Is your IWPS designed and constructed to meet all local discharge standards and the applicable Categorical Industrial User (CIU) standards in 40 CFR Chapter I, Subchapter N?

☒ Yes ☐ No* *If No, you must take immediate steps to address the non-compliance **BEFORE** you can submit this application.

3. Does this IWPS treat hazardous industrial wastewater or hazardous industrial wastewater sludge as defined in 314 CMR 7.02?

☒ Yes ☐ No* *If No, skip to Question 12.

3a. Are you treating concentrated chemical baths, e.g. spent chemical baths, or off-specification products?

☐ Yes ☒ No* *If No, skip to Question 4.

3b. If Yes, describe the concentrated chemical baths you are treating:

IWPS Information (continued)

4. Does your IWPS meet the requirements of "treatment which is an integral part of the manufacturing process" as defined in 310 CMR 30.010?

☒ Yes* ☐ No *If Yes, skip to Question 7.

5.Do you store hazardous industrial wastewater or hazardous industrial wastewater sludge that is generated in your IWPS or in your production processes and stored in tanks or containers?

Note: If you use in-ground tanks for storage of hazardous industrial wastewater or sludge and your IWPS is located in a Drinking Water Zone (see Section 17C of the Instructions; reference language in 310 CMR 30.605), you are not eligible to apply for a BWP IW 38 or BWP IW 39 permit. You must use form BWP IW 40 instead.

☐ Yes ☐ No* *If No, skip to Question 7.

6. Are you in compliance with the requirements for tanks and containers in 310 CMR 30.342 and 343? (See Section 17C in the Instructions)

☐ Yes ☐ No* *If No, you must take immediate steps to address the non-compliance **BEFORE** you can submit this application.

7. Do you have a U.S. Environmental Protection Agency (EPA) hazardous waste generator identification number?

☒ Yes ☐ No* *If No, skip to Question 7b.

7a. What is your EPA identification number?

MAR000010504 Skip to Question 8.
EPA ID #

7b. Explain why you do not have an EPA identification number.

8. Do you have a visible sign in place that warns against unauthorized entry into the IWPS area?

☒ Yes* ☐ No *If Yes, skip to Question 9.

8a. Explain why you do not have a visible sign in place.

Additional IWPS Information (continued)

9.Do you have the required spill containment for the IWPS? (See Section 17C in the Instructions.)

☒ Yes* ☐ No *If Yes, skip to Question 10.

9a. Explain why you do not have the required spill containment.

10. Is your IWPS located on land subject to flooding from a 100-year storm? (See Section 17C in the Instructions.)

☐ Yes ☒ No* *If No, skip to Question 12.

11. Are you in compliance with the flood-proofing provisions in 310 CMR 30.701(2)? (See Section 17C in the Instructions.)

☐ Yes* ☐ No *If Yes, skip to Question 12.

11a. Explain why you are not in compliance with the flood-proofing provisions in 310 CMR 30.701(2).

12. What type of IWPS do you have? (Check all that apply.)

☐ Fully Automated Industrial Wastewater Pretreatment System (FAIWPS)

☒ Continuous Discharge IWPS ☐ Batch IWPS

13. Is the IWPS exempt from classification? (See Section 17C in the Instructions.)

☐ Yes* ☒ No *If Yes, skip to Question 14.

13a. What is the classification of this IWPS? (See 257 CMR 2.13: Classification of Wastewater Treatment Facilities.)

☐ Class 1I	☐ Class 2I	☐ Class 3I
☒ Class 4I	☐ Class 5 or 6C	☐ Class 1M
☐ Class 2M	☐ Class 3M	☐ Class 4M

Additional IWPS Information (continued)

13b. How was the IWPS' classification determined?

☐ 13b1. In accordance with the requirements in 314 CMR 7.05(2)(g) 4. c. or d.

☐ 13b2. By the Board of Certification of Operators of Wastewater Treatment Facilities

☒ 13b3. Both

14. Is the IWPS staffed in accordance with the requirements of 314 CMR 7.05(2)(g) 5? (See Section 17C in the Instructions.)

☒ Yes* ☐ No *If Yes, skip to Question 15.

14a. Explain why the IWPS is not staffed in accordance with 314 CMR 7.05(2)(g) 5.

15. Is this your first permit application under Permit Category BWP IW 38 or BWP IW 39 for the IWPS? Or, is this application a request for modification of the IWPS that currently has a BWP IW 38 or BWP IW 39 permit?

☒ Yes* ☐ No *If Yes, you need to submit as an attachment the process flow diagram and description of the principal treatment processes for your IWPS.

16. How many attachments are included with this application in response to Question 15?

One attachment which includes PFD's and
treatment descriptions for all 5 IWPS's – Attachment 2.

17. Have your sewer connection and IWPS been designed and constructed in compliance with the design and construction standards as set forth in 314 CMR 7.05(2)(g)3?

☒ Yes ☐ No* *If No, skip to Question 17b.

17a. What is the Massachusetts Registered Professional Engineer (MAPE) signature date on the engineering plans?

07/05/2001
Date

Skip to Question 18.

17b. Explain why your sewer connection and IWPS have not been designed and constructed in compliance with the design and construction standards as set forth in 314 CMR 7.05(2)(g)3.

18. Provide the name of the Massachusetts Registered Professional Engineer (MAPE) who reviewed, stamped, and signed your engineering plans:

James M. Arnold 18a. Name	412-269-4330 18b. Phone Number
41144 18c. Mass. P.E. License Number	Chemical 18d. Mass. P.E. Specialty

19. Do you have an IWPS operation and maintenance manual that complies with the procedures and other requirements in 314 CMR 7.05(2)(g)6.?

☒ Yes* ☐ No *If Yes, skip to Question 20.

19a. Explain why you do not have an IWPS operation and maintenance manual.

20. Are you keeping your IWPS operation and maintenance manual current?

☒ Yes ☐ No

21. Are you implementing your IWPS operation and maintenance plan manual?

☒ Yes ☐ No

Massachusetts Department of Environmental Protection
Bureau of Waste Prevention – Industrial Wastewater

Additional IWPS Form

Use With BWP IW 38 & BWP IW 39

W205023
Transmittal Number

Facility ID# (if known)

BWP IW 39
Permit Code

Instructions: Submit a completed copy of this form for each additional Industrial Wastewater Pretreatment System (IWPS) not identified on your BWP IW 38/BWP IW 39 permit application.

Industrial Wastewater Pretreatment System (IWPS) Information

NOTE: Question numbers on this form are identical with those on the BWP IW 38/BWP IW 39 permit application or Industrial Sewer Connection Certification forms. Questions 1 and 1a have been intentionally omitted.

1b. Please provide a unique identifier (i.e. name) for this IWPS:

HD-3 (CUB) Slurry Copper Waste Treatment System (SCW)

1c. What is the Total Design Capacity of this IWPS?

50,400
Gallons Per Day

1d. What is the Average Daily Flow of this IPWS? (Estimate if this is a new facility.)

19,000
Gallons Per Day

1e. What is the Maximum Daily Flow of this IWPS? (Estimate if this is a new facility.)

20,000
Gallons Per Day

2. Is your IWPS designed and constructed to meet all local discharge standards and the applicable Categorical Industrial User (CIU) standards in 40 CFR Chapter I, Subchapter N?

☒ Yes ☐ No* *If No, you must take immediate steps to address the non-compliance **BEFORE** you can submit this application.

3. Does this IWPS treat hazardous industrial wastewater or hazardous industrial wastewater sludge as defined in 314 CMR 7.02?

☒ Yes ☐ No* *If No, skip to Question 12.

3a. Are you treating concentrated chemical baths, e.g. spent chemical baths, or off-specification products?

☐ Yes ☒ No* *If No, skip to Question 4.

3b. If Yes, describe the concentrated chemical baths you are treating:

IWPS Information (continued)

4. Does your IWPS meet the requirements of "treatment which is an integral part of the manufacturing process" as defined in 310 CMR 30.010?

☒ Yes* ☐ No *If Yes, skip to Question 7.

5.Do you store hazardous industrial wastewater or hazardous industrial wastewater sludge that is generated in your IWPS or in your production processes and stored in tanks or containers?

Note: If you use in-ground tanks for storage of hazardous industrial wastewater or sludge and your IWPS is located in a Drinking Water Zone (see Section 17C of the Instructions; reference language in 310 CMR 30.605), you are not eligible to apply for a BWP IW 38 or BWP IW 39 permit. You must use form BWP IW 40 instead.

☐ Yes ☐ No* *If No, skip to Question 7.

6. Are you in compliance with the requirements for tanks and containers in 310 CMR 30.342 and 343? (See Section 17C in the Instructions)

☐ Yes ☐ No* *If No, you must take immediate steps to address the non-compliance **BEFORE** you can submit this application.

7. Do you have a U.S. Environmental Protection Agency (EPA) hazardous waste generator identification number?

☒ Yes ☐ No* *If No, skip to Question 7b.

7a. What is your EPA identification number?

MAR000010504 Skip to Question 8.
EPA ID #

7b. Explain why you do not have an EPA identification number.

8. Do you have a visible sign in place that warns against unauthorized entry into the IWPS area?

☒ Yes* ☐ No *If Yes, skip to Question 9.

8a. Explain why you do not have a visible sign in place.

Additional IWPS Information (continued)

9.Do you have the required spill containment for the IWPS? (See Section 17C in the Instructions.)

☒ Yes* ☐ No *If Yes, skip to Question 10.

9a. Explain why you do not have the required spill containment.

10. Is your IWPS located on land subject to flooding from a 100-year storm? (See Section 17C in the Instructions.)

☐ Yes ☒ No* *If No, skip to Question 12.

11. Are you in compliance with the flood-proofing provisions in 310 CMR 30.701(2)? (See Section 17C in the Instructions.)

☐ Yes* ☐ No *If Yes, skip to Question 12.

11a. Explain why you are not in compliance with the flood-proofing provisions in 310 CMR 30.701(2).

12. What type of IWPS do you have? (Check all that apply.)

☐ Fully Automated Industrial Wastewater Pretreatment System (FAIWPS)

☒ Continuous Discharge IWPS ☐ Batch IWPS

13. Is the IWPS exempt from classification? (See Section 17C in the Instructions.)

☐ Yes* ☒ No *If Yes, skip to Question 14.

13a. What is the classification of this IWPS? (See 257 CMR 2.13: Classification of Wastewater Treatment Facilities.)

☐ Class 1I	☐ Class 2I	☐ Class 3I
☒ Class 4I	☐ Class 5 or 6C	☐ Class 1M
☐ Class 2M	☐ Class 3M	☐ Class 4M

Additional IWPS Information (continued)

13b. How was the IWPS' classification determined?

☐ 13b1. In accordance with the requirements in 314 CMR 7.05(2)(g) 4. c. or d.

☐ 13b2. By the Board of Certification of Operators of Wastewater Treatment Facilities

☒ 13b3. Both

14. Is the IWPS staffed in accordance with the requirements of 314 CMR 7.05(2)(g) 5? (See Section 17C in the Instructions.)

☒ Yes* ☐ No *If Yes, skip to Question 15.

14a. Explain why the IWPS is not staffed in accordance with 314 CMR 7.05(2)(g) 5.

15. Is this your first permit application under Permit Category BWP IW 38 or BWP IW 39 for the IWPS? Or, is this application a request for modification of the IWPS that currently has a BWP IW 38 or BWP IW 39 permit?

☒ Yes* ☐ No *If Yes, you need to submit as an attachment the process flow diagram and description of the principal treatment processes for your IWPS.

16. How many attachments are included with this application in response to Question 15?

One attachment which includes PFD's and descriptions for all 5 IWPS's – Attachment 2.

17. Have your sewer connection and IWPS been designed and constructed in compliance with the design and construction standards as set forth in 314 CMR 7.05(2)(g)3?

☒ Yes ☐ No* *If No, skip to Question 17b.

17a. What is the Massachusetts Registered Professional Engineer (MAPE) signature date on the engineering plans?

04/26/2001
Date

Skip to Question 18.

17b. Explain why your sewer connection and IWPS have not been designed and constructed in compliance with the design and construction standards as set forth in 314 CMR 7.05(2)(g)3.

18. Provide the name of the Massachusetts Registered Professional Engineer (MAPE) who reviewed, stamped, and signed your engineering plans:

Charles Alan 18a. Name	412-269-4330 18b. Phone Number
36275 18c. Mass. P.E. License Number	Mechanical 18d. Mass. P.E. Specialty

19. Do you have an IWPS operation and maintenance manual that complies with the procedures and other requirements in 314 CMR 7.05(2)(g)6.?

☒ Yes* ☐ No *If Yes, skip to Question 20.

19a. Explain why you do not have an IWPS operation and maintenance manual.

20. Are you keeping your IWPS operation and maintenance manual current?

☒ Yes ☐ No

21. Are you implementing your IWPS operation and maintenance plan manual?

☒ Yes ☐ No

Massachusetts Department of Environmental Protection
Bureau of Waste Prevention – Industrial Wastewater

Additional IWPS Form

Use With BWP IW 38 & BWP IW 39

W205023
Transmittal Number

Facility ID# (if known)

BWP IW 39
Permit Code

Instructions: Submit a completed copy of this form for each additional Industrial Wastewater Pretreatment System (IWPS) not identified on your BWP IW 38/BWP IW 39 permit application.

Industrial Wastewater Pretreatment System (IWPS) Information

NOTE: Question numbers on this form are identical with those on the BWP IW 38/BWP IW 39 permit application or Industrial Sewer Connection Certification forms. Questions 1 and 1a have been intentionally omitted.

1b. Please provide a unique identifier (i.e. name) for this IWPS:

HD-3 (CUB) Fluoride Wastewater Treatment System (HFW)

1c. What is the Total Design Capacity of this IWPS?

24,000
Gallons Per Day

1d. What is the Average Daily Flow of this IPWS? (Estimate if this is a new facility.)

17,000
Gallons Per Day

1e. What is the Maximum Daily Flow of this IWPS? (Estimate if this is a new facility.)

19,000
Gallons Per Day

2. Is your IWPS designed and constructed to meet all local discharge standards and the applicable Categorical Industrial User (CIU) standards in 40 CFR Chapter I, Subchapter N?

☒ Yes ☐ No* *If No, you must take immediate steps to address the non-compliance **BEFORE** you can submit this application.

3. Does this IWPS treat hazardous industrial wastewater or hazardous industrial wastewater sludge as defined in 314 CMR 7.02?

☒ Yes ☐ No* *If No, skip to Question 12.

3a. Are you treating concentrated chemical baths, e.g. spent chemical baths, or off-specification products?

☒ Yes ☐ No* *If No, skip to Question 4.

3b. If Yes, describe the concentrated chemical baths you are treating:

Concentrated hydrofluoric acid etching solutions and rinsewaters

IWPS Information (continued)

4. Does your IWPS meet the requirements of "treatment which is an integral part of the manufacturing process" as defined in 310 CMR 30.010?

☒ Yes* ☐ No *If Yes, skip to Question 7.

5.Do you store hazardous industrial wastewater or hazardous industrial wastewater sludge that is generated in your IWPS or in your production processes and stored in tanks or containers?

Note: If you use in-ground tanks for storage of hazardous industrial wastewater or sludge and your IWPS is located in a Drinking Water Zone (see Section 17C of the Instructions; reference language in 310 CMR 30.605), you are not eligible to apply for a BWP IW 38 or BWP IW 39 permit. You must use form BWP IW 40 instead.

☐ Yes ☐ No* *If No, skip to Question 7.

6. Are you in compliance with the requirements for tanks and containers in 310 CMR 30.342 and 343? (See Section 17C in the Instructions)

☐ Yes ☐ No* *If No, you must take immediate steps to address the non-compliance **BEFORE** you can submit this application.

7. Do you have a U.S. Environmental Protection Agency (EPA) hazardous waste generator identification number?

☒ Yes ☐ No* *If No, skip to Question 7b.

7a. What is your EPA identification number?

MAR000010504 Skip to Question 8.
EPA ID #

7b. Explain why you do not have an EPA identification number.

8. Do you have a visible sign in place that warns against unauthorized entry into the IWPS area?

☒ Yes* ☐ No *If Yes, skip to Question 9.

8a. Explain why you do not have a visible sign in place.

Additional IWPS Information (continued)

9.Do you have the required spill containment for the IWPS? (See Section 17C in the Instructions.)

☒ Yes* ☐ No *If Yes, skip to Question 10.

9a. Explain why you do not have the required spill containment.

10. Is your IWPS located on land subject to flooding from a 100-year storm? (See Section 17C in the Instructions.)

☐ Yes ☒ No* *If No, skip to Question 12.

11. Are you in compliance with the flood-proofing provisions in 310 CMR 30.701(2)? (See Section 17C in the Instructions.)

☐ Yes* ☐ No *If Yes, skip to Question 12.

11a. Explain why you are not in compliance with the flood-proofing provisions in 310 CMR 30.701(2).

12. What type of IWPS do you have? (Check all that apply.)

☐ Fully Automated Industrial Wastewater Pretreatment System (FAIWPS)

☒ Continuous Discharge IWPS ☐ Batch IWPS

13. Is the IWPS exempt from classification? (See Section 17C in the Instructions.)

☐ Yes* ☒ No *If Yes, skip to Question 14.

13a. What is the classification of this IWPS? (See 257 CMR 2.13: Classification of Wastewater Treatment Facilities.)

☐ Class 1I	☐ Class 2I	☐ Class 3I
☒ Class 4I	☐ Class 5 or 6C	☐ Class 1M
☐ Class 2M	☐ Class 3M	☐ Class 4M

Additional IWPS Information (continued)

13b. How was the IWPS' classification determined?

☐ 13b1. In accordance with the requirements in 314 CMR 7.05(2)(g) 4. c. or d.

☐ 13b2. By the Board of Certification of Operators of Wastewater Treatment Facilities

☒ 13b3. Both

14. Is the IWPS staffed in accordance with the requirements of 314 CMR 7.05(2)(g) 5? (See Section 17C in the Instructions.)

☒ Yes* ☐ No *If Yes, skip to Question 15.

14a. Explain why the IWPS is not staffed in accordance with 314 CMR 7.05(2)(g) 5.

15. Is this your first permit application under Permit Category BWP IW 38 or BWP IW 39 for the IWPS? Or, is this application a request for modification of the IWPS that currently has a BWP IW 38 or BWP IW 39 permit?

☒ Yes* ☐ No *If Yes, you need to submit as an attachment the process flow diagram and description of the principal treatment processes for your IWPS.

16. How many attachments are included with this application in response to Question 15?

One attachment which includes PFD's and descriptions for all 5 IWPS's - Attachment 2.

17. Have your sewer connection and IWPS been designed and constructed in compliance with the design and construction standards as set forth in 314 CMR 7.05(2)(g)3?

☒ Yes ☐ No* *If No, skip to Question 17b.

17a. What is the Massachusetts Registered Professional Engineer (MAPE) signature date on the engineering plans?

01/17/2003
Date

Skip to Question 18.

17b. Explain why your sewer connection and IWPS have not been designed and constructed in compliance with the design and construction standards as set forth in 314 CMR 7.05(2)(g)3.

18. Provide the name of the Massachusetts Registered Professional Engineer (MAPE) who reviewed, stamped, and signed your engineering plans:

Alan E. Moore 18a. Name	412-269-4330 18b. Phone Number
42998 18c. Mass. P.E. License Number	Mechanical 18d. Mass. P.E. Specialty

19. Do you have an IWPS operation and maintenance manual that complies with the procedures and other requirements in 314 CMR 7.05(2)(g)6.?

☒ Yes* ☐ No *If Yes, skip to Question 20.

19a. Explain why you do not have an IWPS operation and maintenance manual.

20. Are you keeping your IWPS operation and maintenance manual current?

☒ Yes ☐ No

21. Are you implementing your IWPS operation and maintenance plan manual?

☒ Yes ☐ No

Massachusetts Department of Environmental Protection
Bureau of Waste Prevention – Industrial Wastewater

Additional IWPS Form

Use With BWP IW 38 & BWP IW 39

W205023
Transmittal Number

Facility ID# (if known)

BWP IW 39
Permit Code

Instructions: Submit a completed copy of this form for each additional Industrial Wastewater Pretreatment System (IWPS) not identified on your BWP IW 38/BWP IW 39 permit application.

Industrial Wastewater Pretreatment System (IWPS) Information

NOTE: Question numbers on this form are identical with those on the BWP IW 38/BWP IW 39 permit application or Industrial Sewer Connection Certification forms. Questions 1 and 1a have been intentionally omitted.

1b. Please provide a unique identifier (i.e. name) for this IWPS:

HD-3 (CUB) Acid Waste Neutralization System (AWN)

1c. What is the Total Design Capacity of this IWPS?

792,000
Gallons Per Day

1d. What is the Average Daily Flow of this IPWS? (Estimate if this is a new facility.)

400,000
Gallons Per Day

1e. What is the Maximum Daily Flow of this IWPS? (Estimate if this is a new facility.)

500,000
Gallons Per Day

2. Is your IWPS designed and constructed to meet all local discharge standards and the applicable Categorical Industrial User (CIU) standards in 40 CFR Chapter I, Subchapter N?

☒ Yes ☐ No* *If No, you must take immediate steps to address the non-compliance **BEFORE** you can submit this application.

3. Does this IWPS treat hazardous industrial wastewater or hazardous industrial wastewater sludge as defined in 314 CMR 7.02?

☒ Yes ☐ No* *If No, skip to Question 12.

3a. Are you treating concentrated chemical baths, e.g. spent chemical baths, or off-specification products?

☒ Yes ☐ No* *If No, skip to Question 4.

3b. If Yes, describe the concentrated chemical baths you are treating:

Concentrated acidic and caustic etching solutions

IWPS Information (continued)

4. Does your IWPS meet the requirements of "treatment which is an integral part of the manufacturing process" as defined in 310 CMR 30.010?

☒ Yes* ☐ No *If Yes, skip to Question 7.

5.Do you store hazardous industrial wastewater or hazardous industrial wastewater sludge that is generated in your IWPS or in your production processes and stored in tanks or containers?

Note: If you use in-ground tanks for storage of hazardous industrial wastewater or sludge and your IWPS is located in a Drinking Water Zone (see Section 17C of the Instructions; reference language in 310 CMR 30.605), you are not eligible to apply for a BWP IW 38 or BWP IW 39 permit. You must use form BWP IW 40 instead.

☐ Yes ☐ No* *If No, skip to Question 7.

6. Are you in compliance with the requirements for tanks and containers in 310 CMR 30.342 and 343? (See Section 17C in the Instructions)

☐ Yes ☐ No* *If No, you must take immediate steps to address the non-compliance **BEFORE** you can submit this application.

7. Do you have a U.S. Environmental Protection Agency (EPA) hazardous waste generator identification number?

☒ Yes ☐ No* *If No, skip to Question 7b.

7a. What is your EPA identification number?

MAR000010504 Skip to Question 8.
EPA ID #

7b. Explain why you do not have an EPA identification number.

8. Do you have a visible sign in place that warns against unauthorized entry into the IWPS area?

☒ Yes* ☐ No *If Yes, skip to Question 9.

8a. Explain why you do not have a visible sign in place.

Additional IWPS Information (continued)

9.Do you have the required spill containment for the IWPS? (See Section 17C in the Instructions.)

☒ Yes* ☐ No *If Yes, skip to Question 10.

9a. Explain why you do not have the required spill containment.

10. Is your IWPS located on land subject to flooding from a 100-year storm? (See Section 17C in the Instructions.)

☐ Yes ☒ No* *If No, skip to Question 12.

11. Are you in compliance with the flood-proofing provisions in 310 CMR 30.701(2)? (See Section 17C in the Instructions.)

☐ Yes* ☐ No *If Yes, skip to Question 12.

11a. Explain why you are not in compliance with the flood-proofing provisions in 310 CMR 30.701(2).

12. What type of IWPS do you have? (Check all that apply.)

☐ Fully Automated Industrial Wastewater Pretreatment System (FAIWPS)

☒ Continuous Discharge IWPS ☐ Batch IWPS

13. Is the IWPS exempt from classification? (See Section 17C in the Instructions.)

☐ Yes* ☒ No *If Yes, skip to Question 14.

13a. What is the classification of this IWPS? (See 257 CMR 2.13: Classification of Wastewater Treatment Facilities.)

☐ Class 1I ☐ Class 2I ☐ Class 3I

☒ Class 4I ☐ Class 5 or 6C ☐ Class 1M

☐ Class 2M ☐ Class 3M ☐ Class 4M

Additional IWPS Information (continued)

13b. How was the IWPS' classification determined?

☐ 13b1. In accordance with the requirements in 314 CMR 7.05(2)(g) 4. c. or d.

☐ 13b2. By the Board of Certification of Operators of Wastewater Treatment Facilities

☒ 13b3. Both

14. Is the IWPS staffed in accordance with the requirements of 314 CMR 7.05(2)(g) 5? (See Section 17C in the Instructions.)

☒ Yes* ☐ No *If Yes, skip to Question 15.

14a. Explain why the IWPS is not staffed in accordance with 314 CMR 7.05(2)(g) 5.

15. Is this your first permit application under Permit Category BWP IW 38 or BWP IW 39 for the IWPS? Or, is this application a request for modification of the IWPS that currently has a BWP IW 38 or BWP IW 39 permit?

☒ Yes* ☐ No *If Yes, you need to submit as an attachment the process flow diagram and description of the principal treatment processes for your IWPS.

16. How many attachments are included with this application in response to Question 15?

One attachment which includes PFD's and descriptions for all 5 IWPS's – Attachment 2.

17. Have your sewer connection and IWPS been designed and constructed in compliance with the design and construction standards as set forth in 314 CMR 7.05(2)(g)3?

☒ Yes ☐ No* *If No, skip to Question 17b.

17a. What is the Massachusetts Registered Professional Engineer (MAPE) signature date on the engineering plans?

05/17/1996
Date

Skip to Question 18.

17b. Explain why your sewer connection and IWPS have not been designed and constructed in compliance with the design and construction standards as set forth in 314 CMR 7.05(2)(g)3.

18. Provide the name of the Massachusetts Registered Professional Engineer (MAPE) who reviewed, stamped, and signed your engineering plans:

Richard S. Reid 18a. Name	412-269-4330 18b. Phone Number
30892 18c. Mass. P.E. License Number	Mechanical 18d. Mass. P.E. Specialty

19. Do you have an IWPS operation and maintenance manual that complies with the procedures and other requirements in 314 CMR 7.05(2)(g)6.?

☒ Yes* ☐ No *If Yes, skip to Question 20.

19a. Explain why you do not have an IWPS operation and maintenance manual.

20. Are you keeping your IWPS operation and maintenance manual current?

☒ Yes ☐ No

21. Are you implementing your IWPS operation and maintenance plan manual?

☒ Yes ☐ No

Intel Massachusetts, Inc. - Hudson, MA

Fab 17 Semiconductor Manufacturing Facility

Industrial Pre-Treatment Wastewater Systems and Discharges

Intel Massachusetts, Inc. Semiconductor Manufacturing Facility (Fab 17) discharges pretreated industrial wastewater to the Hudson Publicly Owned Treatment Works (POTW). The Fab 17 effluent consists of several wastewater streams, of which the two principal sources are sanitary and manufacturing process aqueous wastewaters.

Sanitary wastewater flows are directed to the Town of Hudson POTW untreated. The following Process Flow Diagrams detail the five (5) pretreatment systems for process wastewaters pretreated on the Intel site prior to discharge to the Hudson POTW.

The wastewater pretreatment systems for these identified streams are:

1. HD-1 Acid Waste Neutralization System (AWN)
2. HD-3 (CUB) Acid Waste Neutralization System (AWN)
3. HD-3 (CUB) Fluoride Wastewater Treatment System (HFW)
4. HD-3 (CUB) Slurry Copper Waste Treatment System (SCW)
5. HD-1 Dilute Lead Waste Treatment System (DLW)

The AWN systems adjust pH with addition of hydrochloric acid (HCl), sulfuric acid (H_2SO_4), and sodium hydroxide (NaOH). Wastewaters with low concentrations of hydrogen fluoride or other fluoride compounds are treated in the HFW system by hydroxide precipitation using a lime solution (CaOH). Low concentrations of dilute lead (Pb) and copper (Cu) waste rinse solutions are each treated by ion exchange in the DLW and SCW pretreatment systems respectively. More detail is provided in the following descriptions.

HD-1 Acid Waste Neutralization System (AWN)

Corrosive rinsewaters from manufacturing areas in HD1 are fed into the HD1 Acid Waste Neutralization (AWN) treatment plant composed of three 3,000 gallon FRP tanks in a continuous-flow, cascading arrangement. The wastewater is neutralized with 96% Sulfuric Acid and 50% Sodium Hydroxide, dosed into each of the three neutralization tanks. Tanks #1 and #2 are equipped with a pair of fine- and gross (bulk)-dosing pumps for each acid and caustic. Tank #3 is only equipped with one fine-dosing pump for acid and one for caustic.

The flow is monitored for pH by means of lateral-insertion, redundant pH probes on each tank. Each tank is equipped with a mixer to provide the necessary agitation. Tanks #2 and #3 are equipped with level transmitters to measure height of liquid in the tanks. Effluent out of Tank #3 is monitored for flow and pH. In the event of a pH reading below 5.5 or above 9.5, a set of Divert Pumps will activate and route the wastewater to a set of two interconnected 3,000 gal tanks designated as GCW-Floor Spill tanks. From here the wastewater is re-routed back to NT-1 to be treated again.

HD-3 (CUB) Acid Waste Neutralization System (AWN)

Corrosive rinsewaters from manufacturing areas in Fab 17 are fed into the HD3 (CUB) Acid Waste Neutralization (AWN) treatment plant which consists of four neutralization tanks in a continuous-flow, cascading arrangement. Tank #1 tank receives waste from Fab 17 manufacturing operations, HF waste treatment (HFW), condenser blow down, supernate from the sludge decant tanks, Regeneration Waste Storage tanks, Grey Water high level blow off, Scrubber blow down, and the Floor Spill Collection system.

Influent into the four tanks is mixed and pH adjusted using 32% hydrochloric acid (HCl) and 50% sodium hydroxide (NaOH) supplied by automatic dosing pumps controlled through continuously monitored pH probes in each tank. The final effluent flows through a flume where it is monitored for pH and flow and then gravity flows to the HD4 outfall building and into the Town of Hudson's sewer system.

HD-3 (CUB) Fluoride Wastewater Treatment System (HFW)

The Hydrofluoric Acid Waste (HFW) process waste system consists of a buffer tank and pumps, an HF waste tank, lime slurry feed system, polymer addition system, flocculation tank, inclined plate separator (clarifier), sludge decant tanks, and neutralization waste transfer tank and pumps. The buffer tank receives concentrated and dilute HF from the Fab 17 manufacturing areas. Other waste side streams that enter the buffer tank include sludge decant tanks supernate water and cooling tower condensate sump sludge.

The purpose of the Fluoride waste treatment system is to reduce Fluoride levels in the waste stream from approximately 250 ppm (2,000 peak ppm) to 20 ppm or less. On-spec waste is pumped from the neutralization waste transfer tank to the HD3 (CUB) Acid Waste Neutralization (AWN) treatment system which then flows via gravity to the city sewer. Off-spec waste is recycled back to the buffer tank for further treatment.

HD-3 (CUB) Slurry Copper Waste Treatment System (SCW)

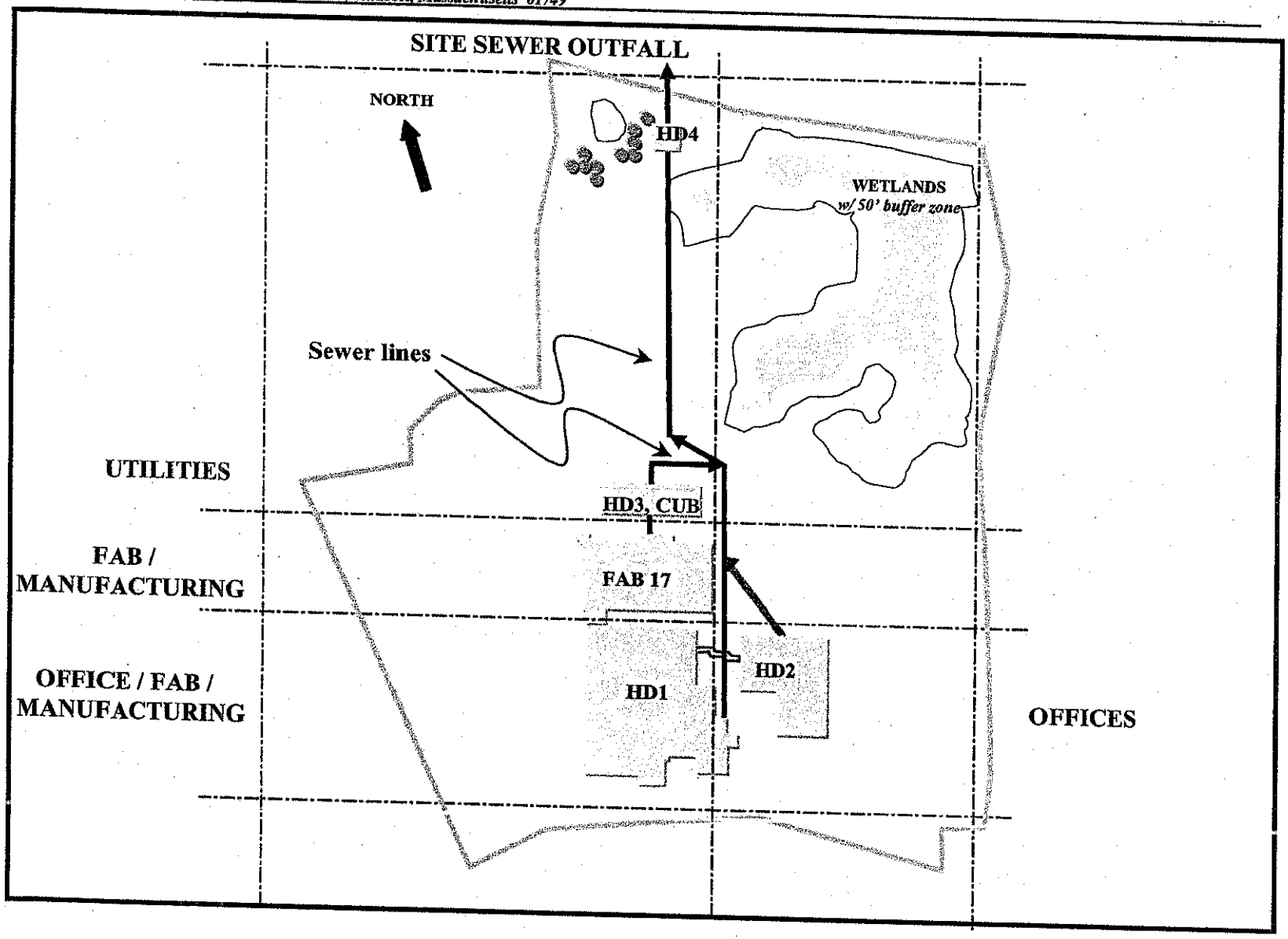
Slurry rinsewaters, or Slurry Copper Waste (SCW), from the Fab 17 copper polishing operations are directed into 3 buffer tanks which gravity feed to the SCW pH adjust tank. The tank has pH sensor/transmitters which control the addition of acid or caustic. 4% Sodium hydroxide (NaOH) or 96% sulfuric acid is added to the pH tank by means of metering pumps. The slurry copper waste then overflows to the SCW concentration tank. A pair of transfer pumps automatically pump the waste to the ceramic membrane filters. A portion of the feed is directed to the solids holding tank using an automatic valve to maintain the desired solids concentration. Permeate or filtrate is controlled using an automatic valve and is directed to the ION Exchange feed tank.

The filtered slurry copper waste collected in the ION Exchange feed tank is automatically pumped to the activated carbon filter and SCW ION Exchange beds by a pair of transfer pumps. The activated carbon filter and ION Exchange beds include differential pressure switches to monitor any build up of solids in the media. A copper monitor is used to measure copper breakthrough from the lead and lag ION Exchange beds. When copper breakthrough occurs on the lead bed, the lead bed is removed from service and a fresh bed is placed online. Effluent from the ION Exchange beds is then directed to the HD3 (CUB) Acid Waste Neutralization (AWN) system.

HD-1 Dilute Lead Waste Treatment System (DLW)

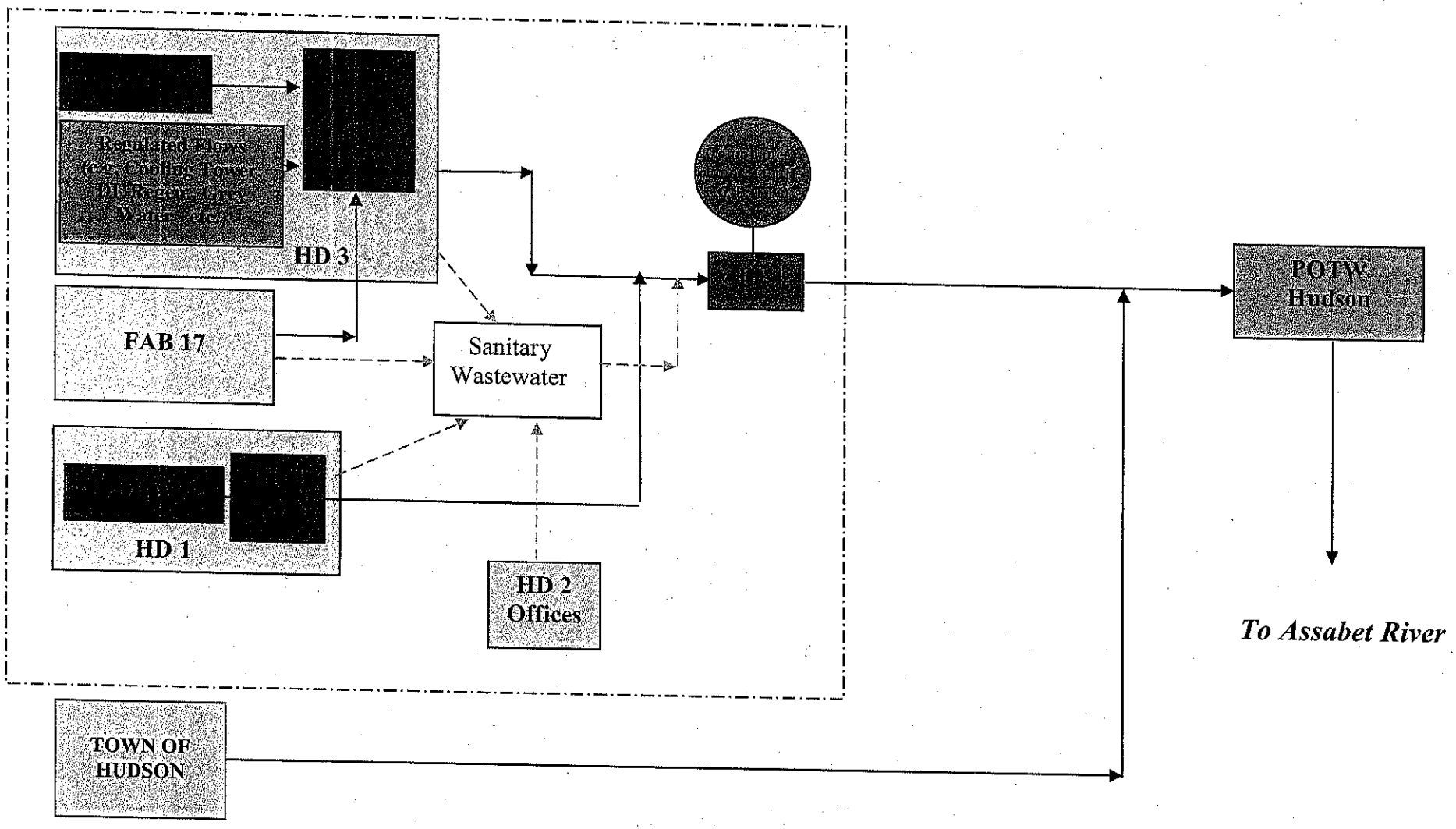
The Dilute Lead Waste (DLW) Treatment system provides preliminary treatment for the weaker lead-based waste flow, removing enough of the metal wastestream to allow it to be discharged into the HD1 AWN system. Dilute Waste flows out of a collection tank and is pumped through two bag filter canisters, which screen the flow for any large particulate. The pressure within the canisters is monitored by gauges mounted on top of the units. The waste then travels up to a valve manifold header that feeds three Cation Ion Exchange Vessels. The line leaving the DLW Ion Exchange Beds leads to the AWN Treatment System.

Intel Corporation Fab 17 *Reed Road, Hudson, Massachusetts 01749*



INTEL MASSACHUSETTS INC. - HUDSON, MA

SITE WASTEWATER FLOWS



REV. C
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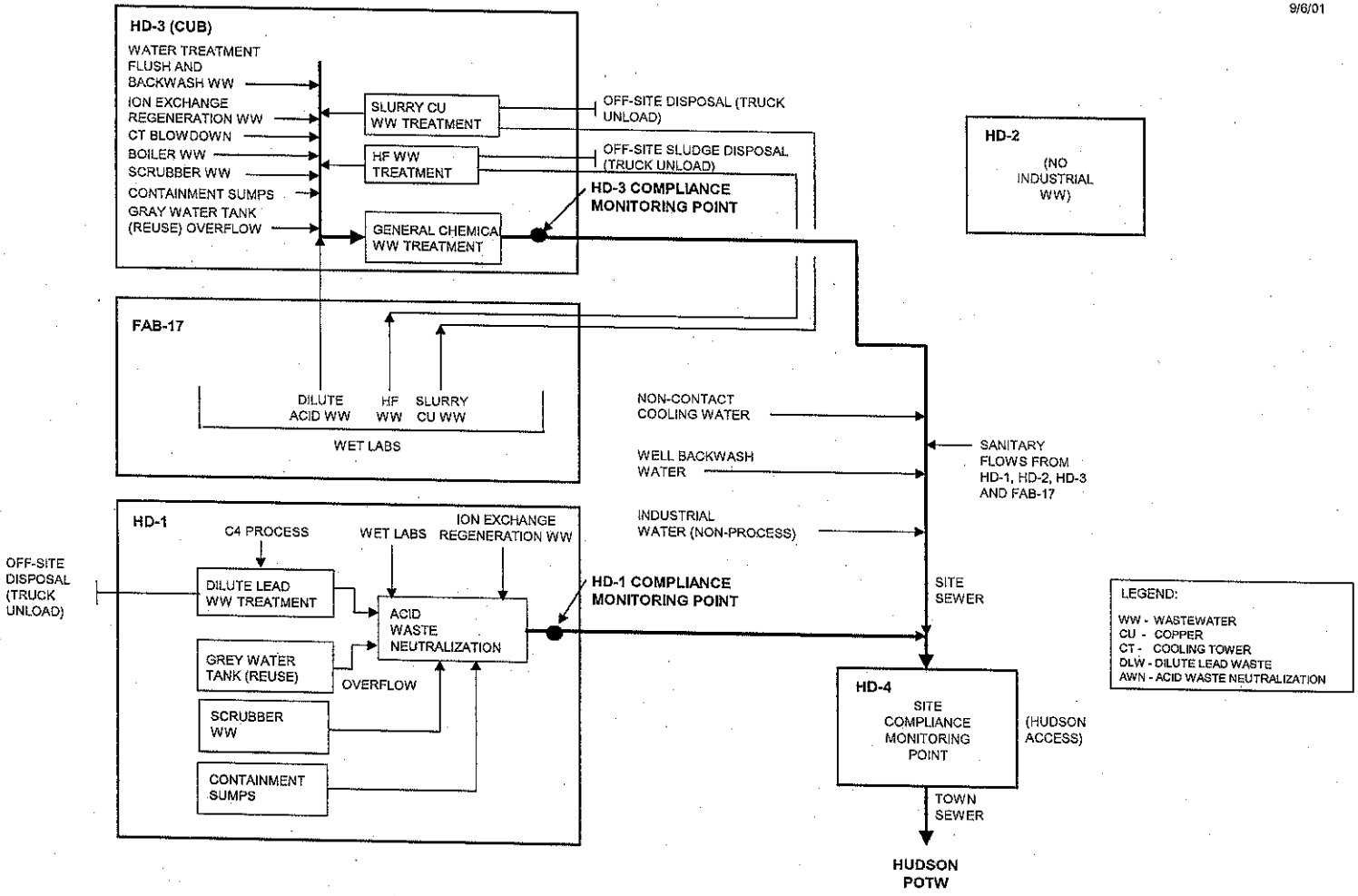
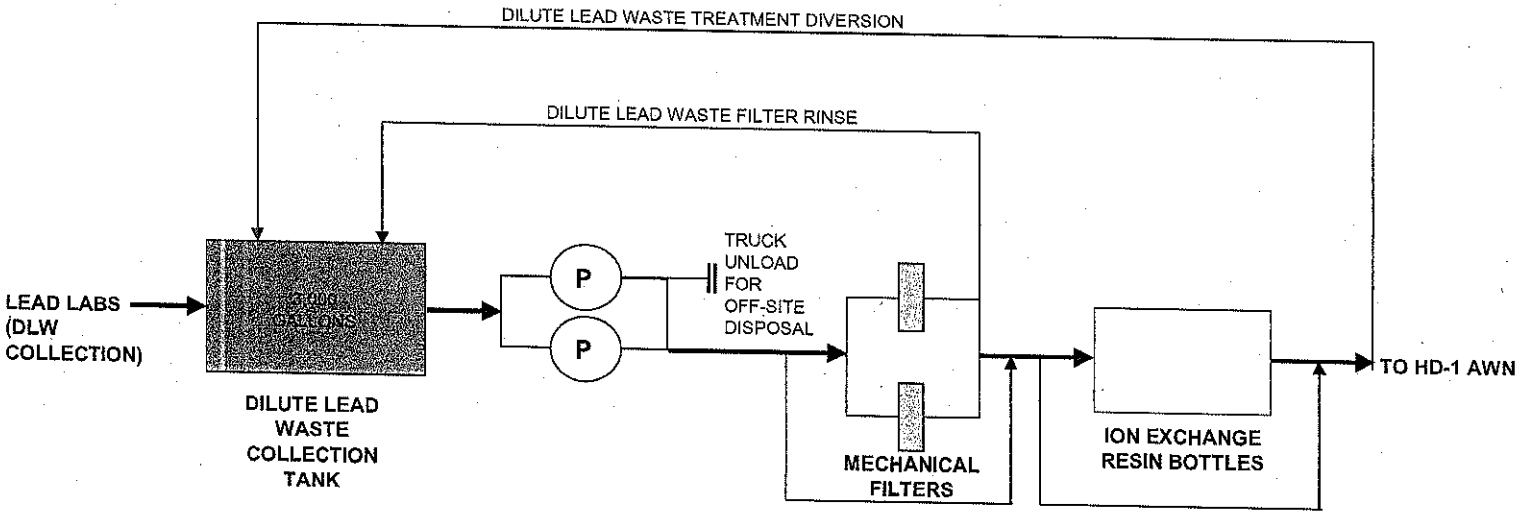


SITE WASTEWATER MANAGEMENT PLAN
INTEL MASSACHUSETTS
HUDSON, MASSACHUSETTS

FIGURE 1

REV. C
9/6/01



HD-1 DILUTE LEAD WASTE (DLW TREATMENT SYSTEM)

FIGURE 2

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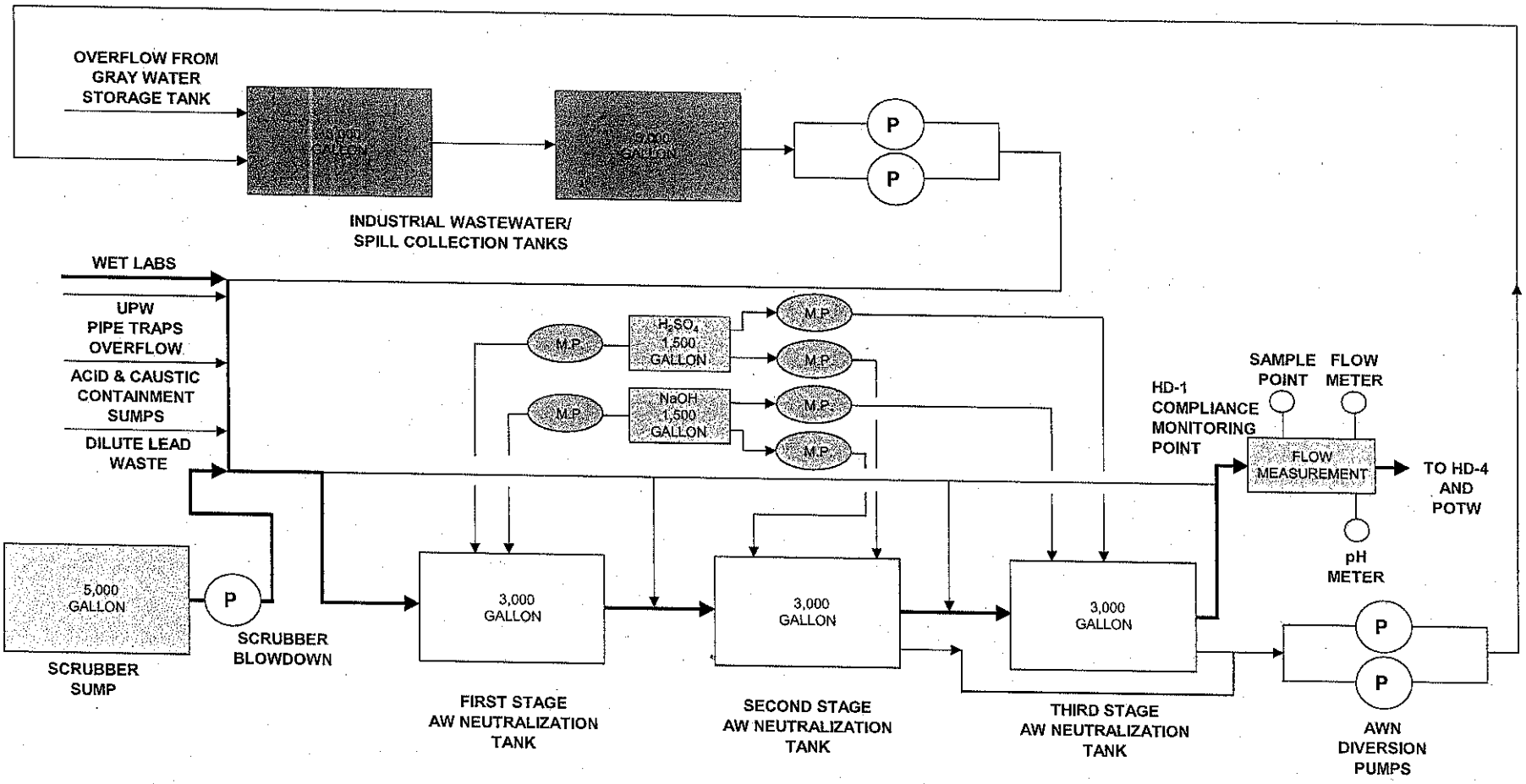
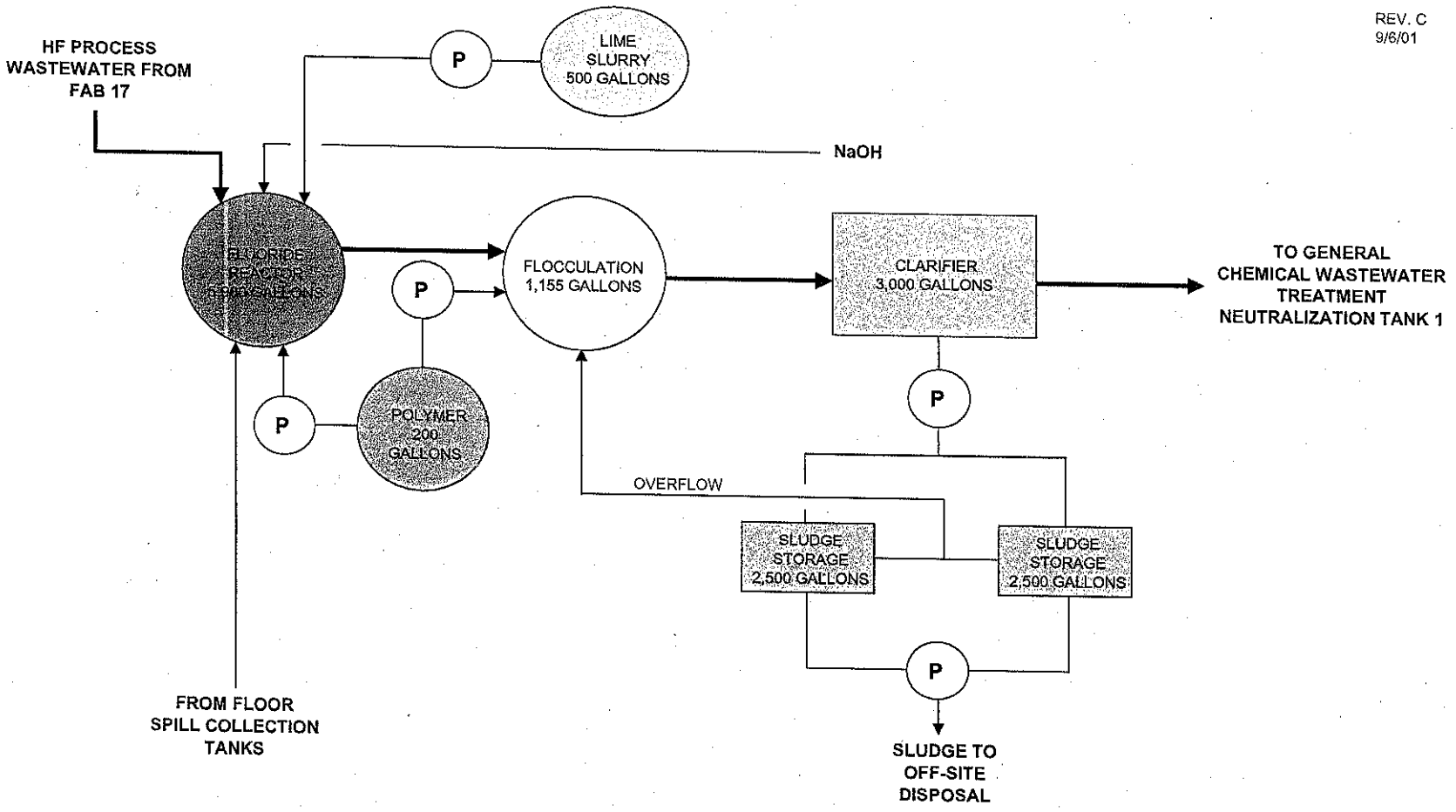


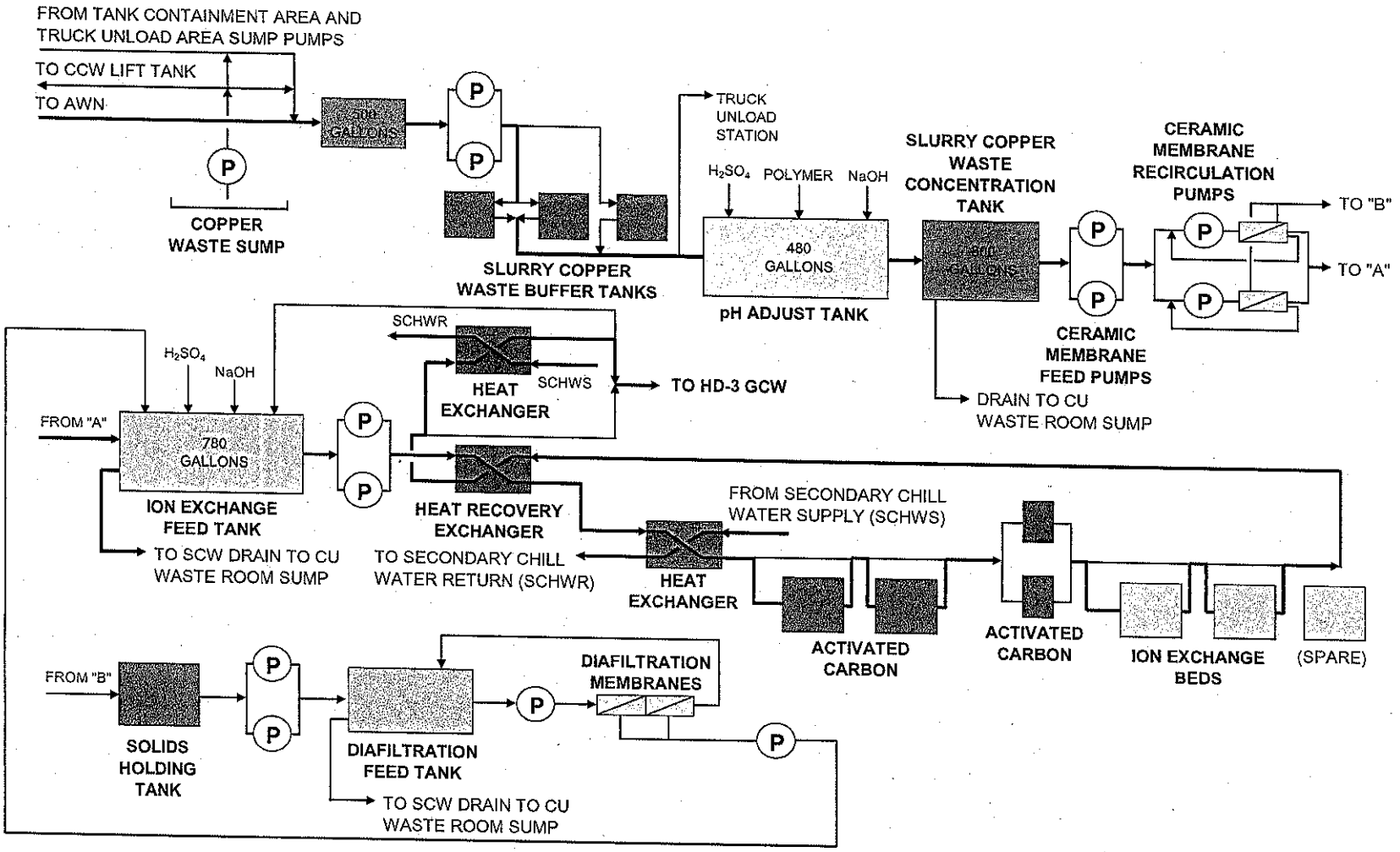
HD-1 ACID WASTE NEUTRALIZATION (AWN) TREATMENT PLANT

FIGURE 3



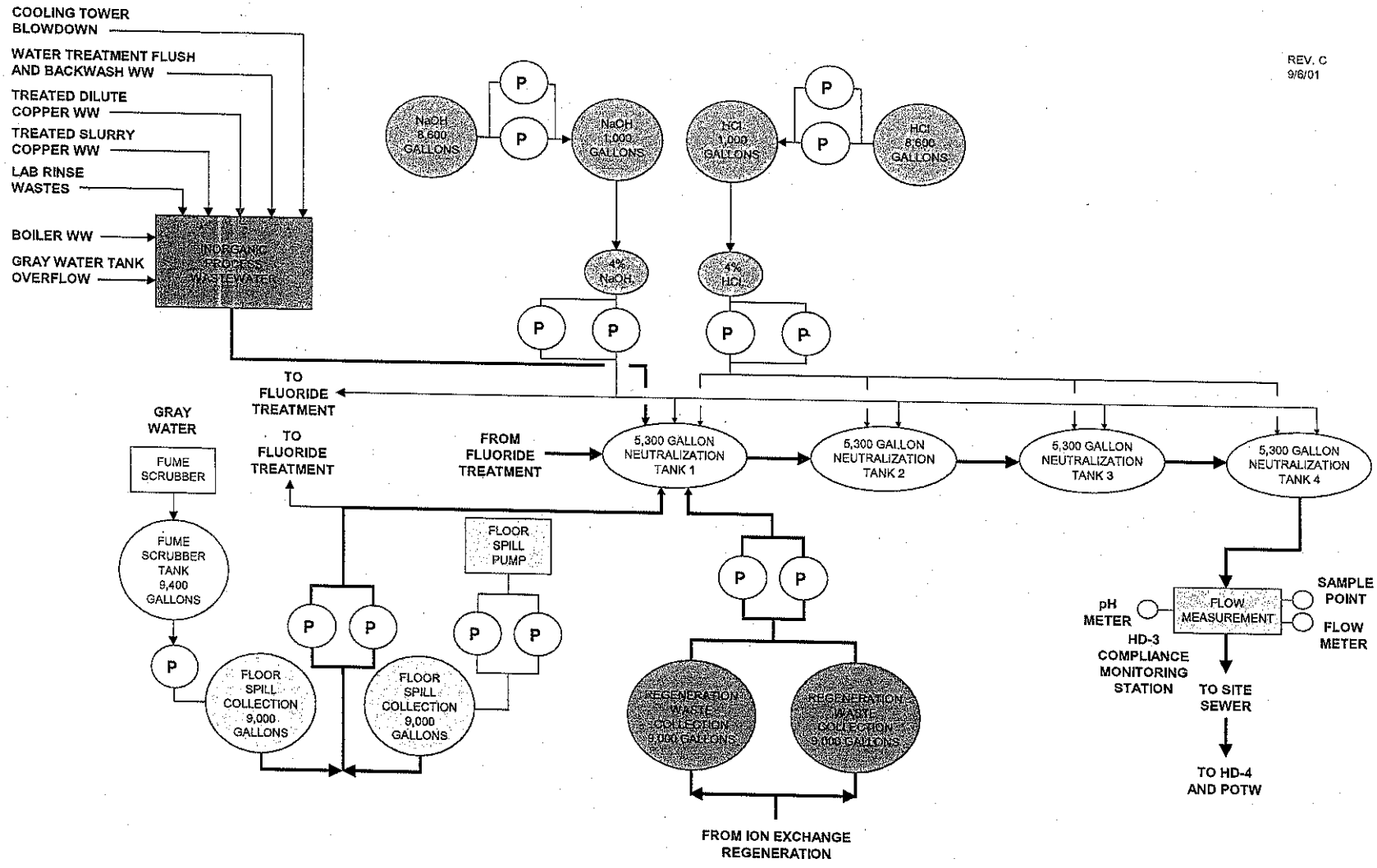
HD-3 (CUB) FLUORIDE WASTEWATER TREATMENT SYSTEM

FIGURE 4



HD-3 SLURRY COPPER WASTE (SCW) TREATMENT SYSTEM

FIGURE 5



HD-3 (CUB) AWN WASTEWATER TREATMENT SYSTEM

FIGURE 6